

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) Method used to establish and/or maintain defined conditions of temperature and humidity in a building,
wherein it comprises the following steps :
 - the filling with water of a supply reservoir ~~(1)~~ connected to at least an evaporator / exchanger ~~(2)~~;
 - the passage of the water contained in the supply reservoir ~~(1)~~ through tubular elements ~~(3)~~ or hollowed-out elements ~~(3)~~ of at least an evaporator / exchanger ~~(2)~~;
 - the generation, by a means of ventilation ~~(7)~~ of a flow of air which is to be cooled toward at least an evaporator / exchanger ~~(2)~~;
 - the spraying of the water in the said airflow toward at least an evaporator / exchanger ~~(2)~~—using a means of spraying or humidification ~~(6)~~, in order to create a humidified and cooled airflow, a thin film of water is created on the external walls of the said tubular elements ~~(3)~~ or said hollowed-out elements ~~(3)~~ when the said airflow and the tubular elements ~~(3)~~ or the

hollowed-out elements ~~(3)~~are in contact;

- the subsequent evaporation of this film of water provoking, by endothermic reaction, a cooling of the water circulating in at least an evaporator / exchanger ~~(2)~~.

2. (Currently Amended) Method according to claim 1,
wherein the tubular elements ~~(3)~~or the hollowed-out elements ~~(3)~~are porous and it comprises the following supplementary steps :

- the exudation of a part of the water circulating in at least an evaporator / exchanger ~~(2)~~ on the external walls of the said tubular elements or hollowed-out elements ~~(3)~~, the exudation being possible due to the porosity of the material which constitutes the tubular or hollowed-out elements ~~(3)~~;
- the creation of a thin film of water on the external walls of the said tubular or hollowed-out elements ~~(3)~~following this exudation of water circulating in at least an evaporator / exchanger ~~(2)~~.

3. (Currently Amended) Method according to ~~one of~~
~~claims 1 and 2~~claim 1,
wherein it comprises the following supplementary steps :

- the collection of the refrigerated water, after its passage in the tubular or the hollowed-out elements (3), in the collection reservoir (4);
- the aspiration of the refrigerated water contained in the collection reservoir (4), using a means of aspiration (5), in order to direct it toward the said means of spraying or humidification (6).

Claim 4 (Cancelled).

5. (Currently Amended) Method according to claim 3,
wherein the refrigerated water is sprayed intermittently with the means of spraying or humidification ~~(6)~~ on the structure of at least an evaporator / exchanger ~~(2)~~.

6. (Currently Amended) Device ~~(8)~~ for implementing the method according to ~~one of claims 1 to 5~~ claim 1, wherein it comprises :

- a supply reservoir ~~(1)~~ connected to at least an evaporator / exchanger ~~(2)~~;
- at least an evaporator / exchanger ~~(2)~~ comprising tubular elements or hollowed-out elements ~~(3)~~ through which the water coming from the supply reservoir ~~(1)~~ circulates;
- means of spraying or humidification ~~(6)~~ that is placed

- behind or above the said at least an evaporator /
exchanger and which sprays refrigerated water, coming
from a collection reservoir , on the structure of the
evaporator / exchanger;
- a means of ventilation ~~(7)~~ generating a flow of air directed toward the means of spraying or humidification ~~(6)~~ in order to produce a humidified and cooled airflow, the means of ventilation being placed behind the means of spraying or humidification,
 - a collection reservoir collecting the refrigerated water coming from at least an evaporator/exchanger, the collection reservoir being arranged beneath the evaporator/exchanger, the collection reservoir may be insulated and comprise a draining plug in the lower face of the device according to the invention,
 - a means used to transmit the refrigerated water contained in a collection reservoir toward the means of spraying or humidification, this means of aspiration being a variable-speed electric pump including a selector of pre-defined speeds or a continuous speed variator, the speed being determined either manually or automatically.

Claims 7-10 (Cancelled).

11. (Currently Amended) Device ~~(8)~~ according to ~~one of claims 6 to 10~~ claim 6, wherein the ~~supply reservoir (1) is directly linked to the mains water supply by an appropriate pipe (11) which may be a rigid tube or a flexible tube reinforced with a metal braid,~~ the supply reservoir ~~(1)~~ comprising a float ~~(16)~~ which automatically controls the opening of an inlet valve as soon as the level of water reaches a minimum and the closure of the inlet valve as soon as the water level reaches a maximum.

Claims 12-16 (Cancelled).

17. (Currently Amended) Device ~~(8)~~ according to ~~one of claims 6 to 15~~ claim 6, wherein some tubular or hollowed-out elements ~~(3)~~ are arranged in front of and also behind the means of ventilation ~~(7)~~, which may be a vertical blade fan or a turbine with horizontal vanes, means of ventilation run at a variable speed and so comprise a selector of pre-defined speeds or a continuous speed variator, the speed being determined either manually or automatically, the tubular or the hollowed-out elements are made of a porous material, and/or the tubular or hollowed-out elements are made of a heat-conducting material and are coated with a material which absorbs the water projected onto the said tubular or hollowed-out elements.

Claims 18-24 (Cancelled).

25. (Currently Amended) Device ~~(8)~~ according to ~~one of claims 6 to 24~~ claim 6, wherein a humidity probe as well as a thermostatic probe respectively control the means of aspiration ~~(5)~~ and the means of ventilation ~~(7)~~, the humidity probe as well as the thermostatic probe are contained together in an external unit, placed in the building to be cooled, this unit may be linked to the device by means of a wireless transmission, said unit comprises controls as well as indicators.

Claims 26-27 (Cancelled).

28. (Currently Amended) Device (8) according to ~~one of claims 6 to 27~~ claim 6, wherein the median zone of the device ~~(8)~~ in which are arranged the means of spraying or humidification ~~(6)~~, the evaporator ~~(2)~~ and the means of ventilation ~~(7)~~ contains a housing having approximately the shape of a truncated pyramid, axis oriented horizontally, with the large base and the small base turned respectively toward the forward and rear face of the device ~~(8)~~,
the device further comprising:

- an exit grill comprised in the forward face of the said device through which the humidified and cooled flow of

- air generated by the means of ventilation is propelled out of the device according to the invention ;
- an air intake grill comprised in the rear face of the device ; this air intake grill comprising flaps or shutters which may be closed partially or completely, and/or a filter to prevent the aspiration of dust which may prejudice the correct working of the apparatus.

Claims 29-33 (Cancelled).

34. (Currently Amended) Device ~~(8)~~ according to ~~one of claims 6 to 33~~ claim 6,
wherein

- a ballast is fixed on the lower face of the device ~~(8)~~ to ensure the seating of the device ~~(8)~~, and/or
- a transparent window is comprised in the front face of the device according to the invention in order to check the level of water in the supply reservoir,
- the supply reservoir comprises a float protected from the ice cubes by a grill or by a perforated sheet envelope, this float controlling an alarm which is sonic and / or visual, and/or
- controls as well as the indicators are placed together on a panel on the front or upper face of the device, and/or

- it is mounted on castors, and/or
- it is modular allowing them to superpose and juxtapose
such modular devices so as to build a fixed assembly,
according to the volume of the building in question.

Claims 35-61 (Cancelled).